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Cooperative Extension Work in Agriculture and Home Economics

Extension Service Circular 204.

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# PROGRESS OF EXTENSION WORK IN RHODE ISLAND DURING THE 5-YEAR PERIOD 1928-33

A Study of 408 Farms and Farm Homes and of 166 Non-Farm Homes in Newport, Providence, and Kent Counties, R.I.-1933

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DISTRIBUTION: A copy of this circular has been sent to each State extension director, State and assistant State leader in county agricultural agent work, home demonstration, and 4-H club work, and to each agricultural-college and experiment station library.

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## Introduction

In March 1928, the Office of Cooperative Extension Work cooperated with the Rhode Island Extension Service in a study of the effectiveness of the Cooperative Extension Service in influencing farmers and farm women to accept the improved farm and home practices being recommended. The findings of this study were published in Extension Service Circular 89--Effectiveness of Extension in Influencing Rural People, A Study of 379 Farms and Farm Homes in Newport, Providence, and Kent Counties, R.I:.

The study reported in this circular was undertaken in an effort to measure the progress made by extension work during the 5-year period 1928-33. Data are presented showing the growth in extension influence during the 5-year period, and how the extension accomplishments of this period compare with those resulting from extension effort during the period organized extension work had been conducted prior to March 1928.

## Method of Collecting Data

The 1933 data were collected during March of that year, or almost exactly 5 years after the 1928 data were collected. The personal-interview survey method was used in both instances. The survey parties were composed of members of the extension staff at the college and of county extension workers from other parts of the State. County extension agents did not take records in their own counties. (Fig. 1a and 1b.)

Because of the increased personnel for home demonstration and 4-H club work, soon after 1928, records were obtained in 1933 from rural non-farm homes as well as farm homes. Separate summaries of the two classes of records have been made, so that the farm and farm-home information for 1933 is comparable to the data obtained in 1928. Essentially the same areas were covered in the 1933 as in the 1928 study. Larger personnel available to participate in the survey and the better weather conditions prevailing at the time made it possible to cover a slightly larger area in 1933 than in 1928. 408 farm and 166 non-farm records were obtained in 1933 as compared to 379 farm records, only, in 1928. No records were obtained from village homes in either year.

## Areas in Three Counties Studied

Throughout the 5-year period, 1928-33, extension work in Rhode Island continued to follow the plan of organization whereby the five counties are divided into three extension districts: Newport County

No.____ Co.____ FARM AND HOME SURVEY OF THE RESULTS OF EXTENSION WORK Date____

Name____ Address____ Community____
Farm___ Non-farm___ Owner___ Tenant___ Size of farm: Total____ Cult.____
Years living this place____ Miles to agent's office____ Kind of road____
No. in family: Adults___ Children under 10 yrs.___ 10-20 yrs.___ Telephone___ Radio____
Member of what farmers' organizations____ Member of what home-makers' clubs____
Leadership in extension: Farm____ Home____ Junior____
Extension activities on farm____ In home____
Extension activities attended or participated in away from farm or home: Agric.____
Home Economics____ Junior____
Nature of contact with co. agt.____ H.D.agt.____ Club agt.____
What specialists contacted? (Projects)____
Receive extension circular letters____ Bulletins____ Names of local extension leaders contacted:____

| Farm and home practices adopted: | Methods largely responsible (See list below) | Extension agents involved: Co.Agt. | H.D.Agt. | Club Agt. | Spec'l. | Loc.ldr. involved |
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Figure 1-A. Obverse side of questionnaire card used in collecting data.

List below names of members of family who have carried on a junior project.

| Name | Present age | In school | When in club work | Project | Why discontinued |
|---|---|---|---|---|---|
| a. | | | | | |
| b. | | | | | |
| c. | | | | | |
| d. | | | | | |

From what radio stations do you get information on agriculture?____
Home Econ.____
What agencies other than Extension do you rely on for assistance in connection with problems relating to: Farm____ Home____
Papers and magazines taken: Daily____
Farm____ Home____
Attitude toward extension work: Agric.____ Home Dem.____ 4-H Club____
Education: Man____ Woman____ Age: Man____ Woman____
Remarks:____

Abbreviations: Correspondence (cor.); office call (o.c.); telephone call (tel.); farm and home visit (f.v.); leader training meeting (l.tr.); bulletin (bul.); circular letter (cir.l.); news story (n.s.); extension school or short course (e.s.); result demonstration; Adult (dem.a.); Junior (dem.jr.); method demonstration meetings (m.dem.) general meeting (mtg.); radio (r.); exhibit (exh.); poster (p.); indirect influence (ind.).

Extension Services of the Rhode Island State College and of the United States Department of Agriculture cooperating.

Figure 1.-B. Reverse side of questionnaire card used in collecting data.

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the first, Providence and Bristol Counties, the second, and Washington and Kent Counties, the third. Representative sections of each of these three districts are included in the study. (Fig. 2.)

With the passage of the Capper-Ketcham Act in May 1928, additional Federal funds became available to the State. This made possible the employment of a full-time home demonstration agent and a full-time 4-H club agent in each of the three extension districts to supplement the work of the regularly employed agricultural agents.

## History of County Agent Work

As shown in table 1, in two of the extension districts the agricultural agents were not changed throughout the period 1928-33. In the third district there was a lapse of service of 2-1/2 months due to change of agent. Home demonstration agents on the county or district basis were first employed late in 1928 or early in 1929. In two of the districts there has been but one change in agent since that time.

Services of 4-H club agents became available to all three districts at about the time the home demonstration agents were employed. Two of the districts have had one change in club agent during the period included in the study. In other words a county agricultural agent has been employed in all districts throughout the 5-year period, and home demonstration and 4-H club agents have been employed for the last 4 years.

TABLE 1.-- Extension agents employed and periods of service 1928-33

| Agricultural agent | Home demonstration agent | Boys' and girls' club agent |
|---|---|---|
| | Newport County | |
| S. D. Hollis, July 1, 1923 to date (March 1933). | Lillian E. Blanding, Oct. 15, 1928, to Sept. 15, 1929. | L.I.Towsley, Oct.15,1928,to Feb.16, 1930. |
| | Nettie H. Simmons, Oct. 15, 1929, to date (March 1933). | C.B.Garey, April 1,1930, to date (March 1933). |
| | Providence and Bristol Co's | |
| W. H. Wood, Oct. 17, 1927 to date (March 1933). | Mrs. V.P. MacFawn, Oct. 15, 1928, to date (March 1933). | Dorothea M. Hoxie, Jan 1, 1929, to date (March 1933). |
| | Kent and Washington Counties | |
| A. A. Thornton, April 4, 1927, to July 31, 1929. | Nora M. Hott, Jan. 15,1929, to April 1, 1930. | Virginia T. Broome, Sept. 15, 1928, to August 15,1930. |
| R. S. Shaw, Oct. 15, 1929, to date (March 1933). | Mrs. D. K. Powell, Sept. 15, 1930, to date (March 1933). | William R. Walker, Sept.15,1930,to date (March 1933). |

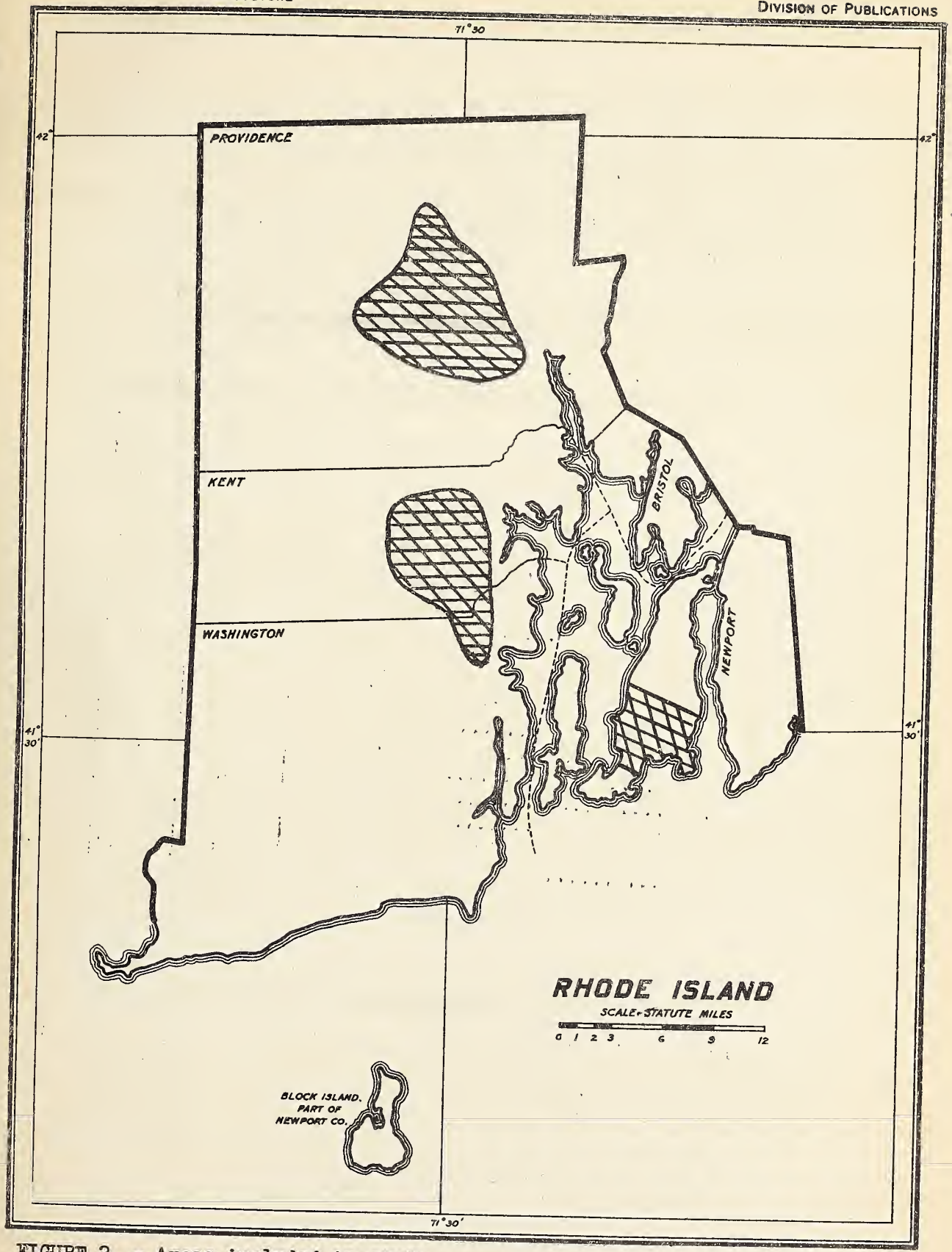


FIGURE 2. - Areas included in study.

## General Information Regarding Farms and Homes Included in Study

The percentage of farms operated by owners, the average size of farm, and the percentage of farm homes with telephones, were practically the same in 1933 as in 1928. (Table 2.) The percentage of farm homes with children of club age and the average number of such children per farm were somewhat higher in 1933 than in 1928. The percentage of farm homes with radios increased from 63 in 1928 to 82 in 1933. The farm homes situated on improved roads also increased from 40 percent in 1928 to 61 percent in 1933. This increase reflected the growth in new highway construction.

The percentage of rural non-farm homes occupied by owners, was lower than the percentage of farm homes so occupied. The non-farm homes also had proportionately fewer telephones.

TABLE 2. -- General information regarding farms and homes included in study

| Item | 1933 | | | 1928 |
|---|---|---|---|---|
| | Farm | Rural non-farm | Total | Farm |
| Farm and home records obtained..... number | 408 | 166 | 574 | 379 |
| Homes operated or occupied by owners..percent | 90 | 71 | 85 | 89 |
| Homes operated or occupied by tenants.percent | 10 | 29 | 15 | 11 |
| Homes with children 10 to 20 years of age percent | 43 | 41 | 42 | 40 |
| Children 10 to 20 years of age..... number | 414 | 152 | 566 | 340 |
| Acres plowable per farm.....average no. | 30 | -- | 30 | 29 |
| Homes with telephones.....percent | 67 | 49 | 62 | 66 |
| Homes with radio.....percent | 82 | 82 | 82 | 63 |
| Homes located on improved road.....percent | 61 | 70 | 64 | 40 |
| Distance from county extension office .....average miles | 6.3 | 6.4 | 6.1 | 6.2 |

## Membership in Farmers' and Homemakers' Associations

The percentage of farms represented by membership in the various farmers' organizations was practically the same in both periods studied; 47 in 1933 and 46 in 1928. (Table 3.) The growth in 1933 in cooperative marketing organizations (chiefly dairy) was more than sufficient to offset the decline in membership in the Grange and the Farm Bureau. Eighteen percent of the rural non-farm homes were represented by membership in farm organizations.

TABLE 3. -- Percentage of farms or homes represented by membership in farm organizations

| Name of organization | 1933 | | | 1928 |
|---|---|---|---|---|
| | Farm | Rural non-farm | Total | Farm |
| | Percent | Percent | Percent | Percent |
| Grange | 21.3 | 15.7 | 19.7 | 26.9 |
| Farm Bureau | 16.7 | 2.4 | 12.5 | 20.6 |
| Local dairymen's cooperative association | 12.7 | 0.6 | 9.2 | 6.9 |
| New England Milk Producers' Association | 3.2 | - | 2.3 | 5.8 |
| Eastern States' Farmers' Exchange | 2.7 | - | 1.9 | 6.6 |
| Dairy-herd improvement association | 2.2 | - | 1.6 | 2.2 |
| Rhode Island Fruit Growers' Association | 2.0 | - | 1.4 | 1.0 |
| Rhode Island Milk Producers'Association | 1.2 | - | 0.9 | 0.5 |
| Miscellaneous: | | | | |
| Dairy | 2.4 | 0.6 | 1.9 | 2.1 |
| Poultry | 2.9 | 0.6 | 2.3 | 2.6 |
| Other | 4.2 | 1.8 | 3.5 | 1.6 |
| Member of any organization | 46.8 | 17.5 | 38.3 | 45.6 |

Membership in women's organizations increased from 8 percent of the farm homes represented in 1928 to 28 percent in 1933, the increase being due to the organization of home demonstration clubs by the home demonstration agents. (Table 4.)

TABLE 4.-Percentage of homes represented by membership in women's organizations

| Name of organization | 1933 | | | 1928 |
|---|---|---|---|---|
| | Farm | Rural non-farm | Total | Farm |
| | Percent | Percent | Percent | Percent |
| Home demonstration club | 27.0 | 16.3 | 23.9 | 2.9 |
| Parents, and teachers'association | 5.4 | 6.6 | 5.7 | 1.8 |
| Miscellaneous | 1.0 | 0.6 | 0.9 | 2.4 |
| Member of any women's organization | 27.7 | 21.7 | 26.0 | 8.2 |

## Papers and Magazines Taken

The percentage of farmers taking farm papers declined slightly between 1928 and 1933, but this decline was about counterbalanced by the increase in farm homes taking home magazines and daily papers. (Table. 5.) There was little difference in rural non-farm homes and farm homes in this respect, other than the much lower percentage of rural non-farm homes (46) taking farm papers, as compared to farm homes (77).

TABLE 5.-- Papers and magazines taken

| Item | 1933 | | | 1928 |
|---|---|---|---|---|
| | Farm | Rural non-farm | Total | Farm |
| Daily paper: | | | | |
| Farms taking.....percent | 83.8 | 84.3 | 84.0 | 81.0 |
| Papers taken.....average number | 1.3 | 1.4 | 1.3 | 1.2 |
| Farm papers: | | | | |
| Farms taking.....percent | 77.4 | 45.8 | 68.0 | 84.7 |
| Papers taken.....average number | 2.2 | 1.8 | 2.2 | 2.0 |
| Home magazines: | | | | |
| Farms taking.....percent | 42.2 | 39.8 | 41.5 | 40.4 |
| Papers taken.....average number | 1.8 | 1.5 | 1.7 | 1.5 |
| Any paper or magazine: | | | | |
| Farms taking.....percent | 92.9 | 91.0 | 92.3 | 91.8 |
| Papers taken.....average number | 3.9 | 2.8 | 3.6 | 1.5 |

## Participation in Extension Activities and Contact with Extension Workers

During the period 1928-33 local leaders from 12 percent of the farms or farm homes assisted with some phase of the extension program as compared to 7 percent during the period prior to 1928. (Table 6.) All the increase in local leadership was in connection with the home demonstration and junior extension programs, which were greatly expanded during the latter part of 1928. Seven percent of the non-farm homes furnished local leaders during the period 1928-33.

The percentage of farms and farm homes represented in any extension activity during the 5-year period since 1928 was 65 as compared to 47 for the period prior to 1928. Though the increase was largest for home demonstration and club activities, there was also a substantial increase in farmers participating in agricultural extension activities. More than one third of the non-farm homes were represented in some extension activity between 1928 and 1933.

As would be expected, the employment of home demonstration and 4-H club agents on a county basis made possible large numbers of personal contacts between farm and non-farm people and these agents. The county agricultural agents, however, contacted 10 percent more farmers during the 5-year period after 1928 than were contacted during the entire period extension work was

TABLE 6. -- Participation in extension activities and contact with extension workers

| Item | 1928-33 5-year period | | | Prior to 1928 |
|---|---|---|---|---|
| | Farm | Rural non-farm | Total | Farm |
| Farm or home records obtained | 408 | 166 | 574 | 379 |
| Farms or homes contributing local leaders | Percent 12.2 | Percent 7.2 | Percent 10.8 | Percent 6.9 |
| Farms contributing local leaders (agricultural) | 5.9 | 0.6 | 4.4 | 5.5 |
| Homes contributing local leaders (Home economics) | 6.4 | 3.0 | 5.4 | 2.1 |
| Homes contributing local leaders (Junior extension) | 4.6 | 4.2 | 4.5 | - |
| Farms on which agricultural extension activities were conducted | 25.7 | 12.0 | 21.8 | 15.0 |
| Additional farms represented in other agricultural extension activities | 25.0 | 4.9 | 19.1 | 26.6 |
| Homes in which home-economics extension activities were conducted | 20.8 | 11.4 | 18.1 | 6.9 |
| Additional homes represented in other home-economics extension activities | 19.4 | 13.9 | 17.8 | 9.8 |
| Homes participating in junior extension activities | 16.4 | 14.4 | 15.8 | 7.9 |
| Farms or homes participating in any extension activities | 65.0 | 35.5 | 56.4 | 47.4 |
| Farms or homes contacting: | | | | |
| Agricultural agent | 62.5 | 12.6 | 48.1 | 51.7 |
| Home demonstration agent | 37.0 | 23.5 | 33.1 | 11.1 |
| 4-H club agent | 20.8 | 15.1 | 19.2 | -- |
| Specialist | 37.5 | 9.6 | 29.4 | 40.9 |
| Any extension worker | 78.7 | 38.0 | 66.9 | 64.9 |
| Local leader | 24.0 | 11.4 | 20.4 | 4.5 |

under way prior to 1928. This increase doubtless reflects greater aggressiveness on the part of agents in prosecuting the extension program, together with more definite programs of work.

The percentage of farm families making direct contacts with specialists from the college declined somewhat following 1928, but still remained at a high level, 38 percent. This decline would seem to be the natural outcome of the employment of additional county extension agents.

During the period 1928-33 some extension worker had made a personal contact with some member of the family in 79 percent of the farms and farm homes, and in 38 percent of the non-farm homes. Increased use of local leaders during the period following 1928 is indicated by the 20 percent increase in farm families making contacts with local leaders. Eleven percent of the non-farm families were contacted by local extension leaders during the period 1928-33.

## Farms and Homes Reporting Adoption of Practices

That some farm or home practices taught by the Extension Service had been adopted during the 5-year period 1928-33 was reported by 69 percent of the farms and farm homes. (Table 7.) This increase was 15 percent over the percentage of farms and homes adopting similar practices prior to 1928. In other words, more progress was made in influencing farm families to accept better practices during the 5-year period 1928-33 than was made during the entire time organized extension work had been under way prior to 1928.

By far the largest increase was in home-economics practices, reflecting the increased emphasis placed upon this phase of the extension program. A substantial increase also was made in bringing about the adoption of agricultural practices, however. The average number of all practices changed per farm and home increased from 2.6 prior to 1928, to 3.2 for the period 1928-33.

Forty-one percent of the non-farm families reported the adoption of extension practices during the 1928-33 period.

TABLE 7.-- Farms and homes adopting practices

| Item | 5-year period 1928-33 | | | Prior to 1928 |
|---|---|---|---|---|
| | Farm | Rural non-farm | Total | Farm |
| Farm or home records obtained | 408 | 166 | 574 | 379 |
| Farms changing some agricultural practice, percent | 60.0 | 24.7 | 49.8 | 52.3 |
| Agricultural practices changed, average number | 2.6 | 1.7 | 2.4 | 2.5 |
| Homes changing some home-economics practice, percent | 29.6 | 22.3 | 27.5 | 7.4 |
| Home-economics practices changed, average number | 2.4 | 2.2 | 2.4 | 1.6 |
| Farms and Homes changing any practice, percent | 69.1 | 41.0 | 61.0 | 54.4 |
| All practices changed, average number | 3.2 | 2.2 | 3.0 | 2.6 |

A list of the practices reported adopted follows in table 8. As in 1928, the principal agricultural practices adopted relate to poultry, orchards, and dairy. Since 1928 home management and home furnishings, and foods and nutrition have received major emphasis from home demonstration workers, whereas prior to that time clothing received most consideration.

TABLE 8.-- Agricultural and home-economics practices reported adopted

| Practice | 5-year period 1928-33 | | Prior to 1928 | |
|---|---|---|---|---|
| | Number | Percentage | Number | Percentage |
| Records | 574 | | 379 | |
| Poultry | 171 | 29.8 | 123 | 32.4 |
| Orchard | 151 | 26.3 | 116 | 30.6 |
| Dairy | 99 | 17.2 | 91 | 24.0 |
| Insect and rodent control | 72 | 12.5 | 10 | 2.6 |
| Soils | 55 | 9.6 | 67 | 17.7 |
| Legume and forage crops | 54 | 9.4 | 33 | 8.7 |
| Vegetable growing | 23 | 4.0 | 5 | 1.3 |
| Farm management | 11 | 1.9 | | |
| Engineering | 8 | 1.4 | | |
| Miscellaneous: Crops | 23 | 4.0 | 18 | 4.7 |
| Livestock | 14 | 2.4 | 18 | 4.7 |
| Agriculture | 15 | 2.6 | 9 | 2.4 |
| Total agriculture | 696 | | 490 | |
| Foods and nutrition | 155 | 27.0 | | |
| Home management and house furnishing | 101 | 17.6 | | |
| Sewing | 63 | 11.0 | 6 | 1.6 |
| Clothing and millinery | 35 | 6.1 | 20 | 5.3 |
| Miscellaneous home economics | 20 | 3.5 | 19 | 5.0 |
| Total home economics | 374 | | 45 | |
| Total agriculture and home economics | 1,070 | | 535 | |

## Relative Influence of Extension Methods

A total of 1,070 instances of adoption of improved practices was reported for the 574 farms and homes included in the 1933 study, 696 relating to agriculture and 374 relating to home economics. In each case a record was made of the means and agencies which were responsible for the acceptance of the new practice. It frequently happened that several means had contributed to the adoption of a single practice.

Table 9 gives for the various means and agencies employed in extension teaching, the frequency with which each was reported as having influenced the adoption of practices. The similarity of influence of the various means and agencies as brought out by the data collected in 1933 and in 1928 is striking. The four most important means of directly influencing the adoption of agricultural practices --farm visits, circular letters, method-demonstration meetings, and general meetings-- were reported in the same order both years. Meetings, both method-demonstration and general, accounted for the vast majority of home-

economics practices adopted during both periods studied. Next in relative importance were the circular letter and the home visit. The junior result demonstration apparently had a much greater influence upon the adoption of both agricultural and home-economics practices during the period 1928-33 than prior to 1928, largely due no doubt to the larger number of such demonstrations conducted. The increase in influence of junior result demonstrations was largely offset by the decrease in influence of the adult result demonstrations.

The low influence of news stories and the small amount of indirect spread from neighbor to neighbor in both periods studied, may be accounted for by the urban character of the newspapers and the dominance of urban influence throughout the rural sections of the State.

The radio and the leader-training meetings were not mentioned in connection with the adoption of practices prior to 1928, but were noticeable influences from 1928 to 1933.

TABLE 9.-- Relative frequency with which means and agencies were reported as having influenced changes in practices

| Means or agency | Percentage of practices adopted | | | | | |
|---|---|---|---|---|---|---|
| | 5-year period 1928-33 | | | Prior to 1928 | | |
| | Total | Agricul-ture | Home Econ. | Total | Agricul-ture | Home Econ. |
| Farm or home visit | 36.2 | 51.1 | 8.3 | 39.6 | 43.1 | 2.2 |
| Circular letter | 27.6 | 37.5 | 9.1 | 26.7 | 28.2 | 11.1 |
| Method demonstration meeting | 39.6 | 22.4 | 71.6 | 26.6 | 20.6 | 91.1 |
| General meeting | 17.8 | 9.2 | 34.0 | 9.9 | 8.0 | 31.1 |
| Junior result demonstration | 3.8 | 2.3 | 6.7 | 0.2 | .0 | 2.2 |
| Adult result demonstration | 3.0 | 4.6 | .0 | 6.5 | 7.1 | .0 |
| Bulletin | 3.6 | 4.5 | 1.9 | 6.9 | 7.6 | .0 |
| Office call | 2.5 | 3.6 | 0.5 | 2.4 | 2.7 | .0 |
| Radio | 2.4 | 1.9 | 3.5 | .0 | .0 | .0 |
| Correspondence | 1.5 | 2.0 | 0.5 | 6.7 | 7.3 | .0 |
| Extension school | 1.1 | 1.7 | .0 | 1.1 | 1.2 | .0 |
| Leader training meeting | 0.7 | .0 | 2.1 | .0 | .0 | .0 |
| Telephone | 0.5 | 0.4 | 0.5 | 0.9 | 1.0 | .0 |
| News story | 0.3 | 0.4 | .0 | 0.4 | 0.4 | .0 |
| Indirect | 2.6 | 2.8 | 3.2 | 7.9 | 8.6 | .0 |

## Methods Responsible for Adoption of Practices, and Extension Workers Involved

Grouping the various means and agencies according to major use, whether for publicity, personal service, or object lesson, (table 10) one notes the increased importances of publicity and object-lesson methods following 1928, and the decreased influence of personal-service methods, though the decrease is small. The shift in emphasis upon

types of teaching means or agency is largely due, no doubt, to the greatly increased volume of home demonstration work which got under way in 1928 and 1929.

The increased volume of home demonstration and club work also largely accounts for the smaller percentages of practices credited to agricultural agents and specialists during the period 1928 to 1933 when compared to the period prior to 1928.

Local leaders were credited with having influenced 2 1/2 times as many practices in 1928 to 1933 as prior to 1928.

TABLE 10.-- Methods responsible for adoption of practices and extension workers involved

| Item | 5-year period 1928-33 | Prior to 1928 |
|---|---|---|
| Total practices adopted.....number | 1070 | 535 |
| Agricultural practices adopted.....number | 696 | 490 |
| Home-economics practices adopted....number | 374 | 45 |
| Practices influenced by: | | |
| Publicity methods.....percent | 52 | 38 |
| Personal-service methods.....percent | 42 | 45 |
| Object-lesson methods.....percent | 46 | 32 |
| Indirect influence.....percent | 3 | 8 |
| Practices influenced by: | | |
| Agricultural agents.....percent | 53 | 71 |
| Home demonstration agents.....percent | 31 | 6 |
| Club agents.....percent | 9 | 0 |
| Subject-matter specialists.....percent | 31 | 61 |
| Local leaders.....percent | 10 | 4 |

From the standpoint of people influenced to adopt practices, publicity methods were quite outstanding, being mentioned in connection with 85 percent of the people influenced to adopt practices during 1928 to 1933. (Table 11.) The fact that personal-service and object-lesson methods were reported as having influenced increased numbers of people to adopt practices, is again evidence of greater aggressiveness in prosecuting the extension program since 1928. Indirect influence seemed to be of even less importance during the period 1928 to 1933 than during the period prior to 1928.

The increased influence of home demonstration and club agents upon individuals to adopt practices after 1928 is explained largely by the increased number of these agents employed. The decreased influence of the agricultural agents and State specialists may be accounted for only partially by the inclusion of non-farm rural homes in the 1933 study.

TABLE 11. -- Methods which influenced people to adopt practices and extension workers involved

| Item | 5-year period 1928-33 | Prior to 1928 |
|---|---|---|
| Farmers or homemakers reporting adoption of practices.....number | 350 | 206 |
| Farmers or homemakers influenced by: | | |
| Publicity methods.....percent | 85 | 51 |
| Personal-service methods.....percent | 62 | 54 |
| Object-lesson methods.....percent | 60 | 44 |
| Indirect influence.....percent | 6 | 12 |
| Farmers or homemakers influenced to adopt practices by: | | |
| Agricultural agents.....percent | 41 | 74 |
| Home demonstration agents.....percent | 22 | 8 |
| Club agents.....percent | 10 | 0 |
| Subject-matter specialists.....percent | 27 | 71 |
| Local leaders.....percent | 10 | 5 |

## Condition of Tenure as Related to Adoption of Practices

Of the 574 farms and rural non-farm homes included in the 1933 study 85 percent were occupied by owners and 15 percent by tenants. (Table 12.) The percentage of tenants was only slightly higher than for the 379 farms studied in 1928. More than twice as great a percentage of owners reported the adoption of agricultural practices than was true of tenants. In the case of home-economics practices there was a slight advantage on the side of the tenant families. Data from the 1928 study are shown alongside the 1933 data for purpose of comparison.

TABLE 12. -- Condition of tenure in relation to adoption of practices
574 records, 1933 - 379 records, 1928

| Group | Number of farms or homes | Percentage of all farms or homes | Average size of farm | Percentage of farms and homes in which practices were changed. | | | Number of practices changed per 100 farms or homes |
|---|---|---|---|---|---|---|---|
| | | | | Agricultural | Home economics | Any practice | |
| 5-year period, 1928-33: | | | | | | | |
| Owners..... | 487 | 85 | 31 | 54 | 27 | 64 | 201 |
| Tenants..... | 87 | 15 | 22 | 25 | 29 | 42 | 104 |
| Prior to 1928: | | | | | | | |
| Owners..... | 338 | 89 | 29 | 52 | 8 | 55 | 146 |
| Tenants..... | 41 | 11 | 27 | 49 | 2 | 49 | 105 |

## Length of Tenure in Relation to Adoption of Practices

The length of time the family had lived at the present place of abode seemed to be directly related to the percentage reporting the adoption of both agricultural and home-economics practices. (Table 13.) In the case of families having lived less than 10 years at the same place 39 percent adopted agricultural practices and 23 percent adopted home-economics practices. Where length of tenure was over 20 years these percentages were 63 and 34. Similar data were not obtained in 1928.

TABLE 13. -- Length of tenure in relation to adoption of extension practices 574 records, 1933

| Group | Number of farms or homes | Percentage of all farms or homes | Percentage of farms or homes in which practices were adopted. | | | Number of practices adopted per 100 farms or homes |
|---|---|---|---|---|---|---|
| | | | Agricultural | Home economics | Any practice | |
| 5-year period, 1928-33: | | | | | | |
| 1 to 10 years..... | 283 | 49 | 39 | 23 | 50 | 150 |
| 11 to 20 years..... | 133 | 23 | 57 | 29 | 68 | 209 |
| Over 20 years..... | 158 | 28 | 63 | 34 | 75 | 232 |

## Size of Farm in Relation to Adoption of Practices

Sorting the 408 farm records obtained in 1933 according to size of farm as measured by tillable acres reveals a direct relationship between size of farm and the percentage of farmers reporting the adoption of agricultural practices. (Table 14.) Size of farm apparently has little bearing upon the extent of adoption of home-economics practices. These same relationships were brought out in the 1928 data.

TABLE 14. -- Relation of size of farms to number of farms on which practices were changed 408 records, 1933--379 records, 1928

| Group | Number of farms | Percentage of all farms | Percentage of farms on which practices were changed | | | Number of practices changed per 100 farms or homes |
|---|---|---|---|---|---|---|
| | | | Agricultural | Home Economics | Any practice | |
| 5-year period 1928-33: | | | | | | |
| 0 to 10 acres | 162 | 39 | 48 | 25 | 57 | 169 |
| 11 to 20 acres | 84 | 21 | 60 | 32 | 70 | 214 |
| 21 to 40 acres | 98 | 24 | 66 | 31 | 76 | 232 |
| 41 to 60 acres | 39 | 10 | 80 | 38 | 87 | 364 |
| Over 60 acres | 25 | 6 | 88 | 32 | 88 | 384 |
| Prior to 1928: | | | | | | |
| 0 to 10 acres | 119 | 31 | 34 | 7 | 38 | 75 |
| 11 to 20 acres | 84 | 22 | 55 | 6 | 56 | 123 |
| 21 to 40 acres | 100 | 27 | 59 | 7 | 60 | 167 |
| 41 to 60 acres | 43 | 11 | 58 | 7 | 65 | 191 |
| Over 60 acres | 33 | 9 | 76 | 15 | 79 | 285 |

## Distance of Farms and Homes from Extension Office in Relation to Adoption of Practices

Seven eighths of the farms and homes studied in 1933 were within 10 miles of the county extension office. During the 5-year period 1928-33 the percentage of families less than 10 miles and of families more than 10 miles from the county extension office that reported the adoption of agricultural practices was almost identical. (Table 15.) The same was also true of the adoption of home-economics practices. Prior to 1928 the families less than 10 miles away made greater use of extension information. With the enlarged staff of county extension agents it apparently has been possible to cover the outlying parts of the county as thoroughly as those parts close by the county extension office.

TABLE 15.-- Relation of distance of farms from extension office to change of practices
574 records, 1933 - 379 records, 1928

| Group | Number of farms | Percentage of all farms | Percentage of farms on which practices were changed. | | | Number of practices changed per 100 farms |
|---|---|---|---|---|---|---|
| | | | Agricultural | Home economics | Any practice | |
| 5-year period 1928-33: | | | | | | |
| 1 to 10 miles..... | 506 | 88 | 50 | 27 | 61 | 188 |
| Over 10 miles..... | 68 | 12 | 48 | 29 | 62 | 176 |
| Prior to 1928: | | | | | | |
| 1 to 10 miles..... | 327 | 86 | 54 | 8 | 56 | 151 |
| Over 10 miles..... | 52 | 14 | 40 | 6 | 44 | 79 |

## Character of Roads in Relation to Adoption of Practices

In 1928 only 40 percent of the homes studied were situated on improved roads. State road construction during the period 1928-33 made rapid progress, with the result that in 1933, 64 percent of the homes in the same area were situated on improved roads. (Table 16.) The character of the roads upon which the home was situated seems to have had little bearing upon the adoption of recommended practices. In fact a slightly higher percentage of families on unimproved roads adopted practices than of families on improved roads. In the 1928 study the reverse was true. This again doubtless reflects the increased size of the county extension personnel.

TABLE 16. -- Nature of roads in relation to change of practices
574 records, 1933 - 379 records, 1928

| Group | Number of farms | Percentage of all farms | Percentage of farms on which practices were adopted. | | | Number of practices adopted per 100 farms |
|---|---|---|---|---|---|---|
| | | | Agricultural | Home economics | Any practice | |
| 5-year period 1928-33 | | | | | | |
| Improved roads..... | 365 | 64 | 48 | 26 | 60 | 176 |
| Unimproved roads.... | 209 | 36 | 53 | 30 | 63 | 204 |
| Prior to 1928: | | | | | | |
| Improved roads..... | 153 | 40 | 55 | 5 | 56 | 161 |
| Unimproved roads.... | 226 | 60 | 50 | 9 | 53 | 128 |

Educational Training as Bearing upon Acceptance of Recommended Practices

Approximately 7 percent more farmers or rural non-farmers in 1933 had received educational training beyond the eighth grade than was true of the farmers studied in 1928. (Table 17.) The number of agricultural practices reported adopted per 100 farms was 190 for the college group and 134 for the high-school group, as compared to 110 for the common-school group.

TABLE 17. -- Education of rural men as related to adoption of agricultural practices. 574 records, 1933 - 379 records, 1928

| Educational training | Number | Percentage of all men | Percentage adopting agricultural practices | Number of agricultural practices adopted per 100 farms |
|---|---|---|---|---|
| 5-year period 1928-33: | | | | |
| College | 40 | 7 | 72 | 190 |
| High school, but no college | 140 | 24 | 50 | 134 |
| Common school only | 366 | 64 | 48 | 110 |
| Prior to 1928: | | | | |
| Some high school or college | 91 | 24 | 71 | 199 |
| Common school or less | 255 | 76 | 47 | 109 |

In the case of the farm or rural non-farm women the importance of high-school or college training was even more pronounced than in the case of the farm men. (Table 18.) The college group reported 173 practices changed per 100 homes, in contrast with 92 for the high-school group and 49 for the common-school group.

TABLE 18. -- Education of rural women as related to adoption of home-economics practices 574 records, 1933 - 379 records, 1928

| Educational training | Number | Percentage of all women | Percentage adopting home-economics practices | Number of home-economics practices adopted per 100 homes |
|---|---|---|---|---|
| 5-year period 1928-33: | | | | |
| College | 33 | 6 | 54 | 173 |
| High school but no college | 149 | 26 | 36 | 92 |
| Common school only | 366 | 64 | 24 | 49 |
| Prior to 1928: | | | | |
| Some high school or college | 84 | 35 | 17 | 26 |
| Common school or less | 246 | 65 | 5 | 9 |

## Relation of Age to Adoption of Practices

That age is no barrier to the use of extension information is evident from table 19, where farmers and rural non-farm men are grouped according to age. The group under 35 years of age reported the fewest practices adopted, whereas the group over 55 years of age reported the largest number of practices changed. This is just the reverse of the situation found to exist in 1928. The inclusion of the rural non-farm men in 1933 offers but a partial explanation.

TABLE 19. -- Relation of age of rural men to adoption of agricultural practices
574 records, 1933 - 379 records, 1928

| Age group | Number | Percentage of all men | Percentage adopting agricultural practices | Number of agricultural practices adopted per 100 farms |
|---|---|---|---|---|
| 5-year period 1928-33: | | | | |
| 35 years and under | 108 | 19 | 41 | 95 |
| 36 to 45 years | 130 | 23 | 52 | 128 |
| 46 to 55 years | 158 | 28 | 50 | 120 |
| 56 years and over | 150 | 26 | 57 | 139 |
| Prior to 1928: | | | | |
| 35 years and under | 64 | 17 | 62 | 150 |
| 36 to 45 | 84 | 22 | 60 | 144 |
| 46 to 55 | 97 | 26 | 46 | 120 |
| 56 and over | 122 | 32 | 43 | 111 |

In the case of the farm and rural non-farm women, the age group 36 to 45 years reported greater frequency of adoption of practices in 1928-33 than did the group next younger or the two older groups. (Table 20.) Exactly the same situation was revealed by the 1928 study. The greater frequency with which all age groups adopted home-economics practices in 1933 as compared to the period prior to 1928 is again due to the increased volume of home demonstration work under way since 1928.

TABLE 20. -- Relation of age of rural women to adoption of home-economics practices

574 records, 1933 - 379 records, 1928

| Age group | Number | Percentage of all women | Percentage adopting home-economics practices | Number of home economics practices adopted per 100 homes |
|---|---|---|---|---|
| 5-year period, 1928-33: | | | | |
| 35 years and under | 126 | 22 | 27 | 71 |
| 36 to 45 years | 158 | 28 | 33 | 85 |
| 46 to 55 years | 138 | 24 | 28 | 67 |
| 56 and over | 126 | 22 | 26 | 45 |
| Prior to 1928: | | | | |
| 35 years and under | 72 | 19 | 4 | 8 |
| 36 to 45 years | 108 | 29 | 10 | 15 |
| 46 to 55 years | 95 | 25 | 7 | 15 |
| 56 and over | 74 | 19 | 8 | 9 |

## Participation in Extension Activities and Contact with Extension Agents as Related to Adoption of Practices

So far the factors considered, such as tenure, size of farm, educational training, age, and the like, have been of such a nature as to be largely if not entirely beyond the control of the extension worker. The extent to which farmers and their wives and rural people generally have been led to participate in extension activities, and otherwise have been brought into contact with extension agents is a matter, however, which is determined largely by the teaching activities of the agent. When the activity has been held on the farm or in the home 70 percent of the families reported the adoption of agricultural practices and 50 percent home-economics practices. (Table 21.)

In the case of other families attending activities at their neighbor's farm or at some community meeting places, the corresponding percentages were 64 and 40. In the case of those families where no member of the family had taken part in an extension activity, 27 percent adopted agricultural practices and 4 percent adopted home-economics practices. The indirect spread of home-economics practices to those outside the formal teaching groups is much less for home economics than for agriculture.

If in addition to persons attending extension meetings and otherwise participating in extension activities there are added those who may have come into contact with extension workers in other ways such as by office calls, farm or home visits, and correspondence,

TABLE 21.-- Participation in extension activities as bearing on farms and homes changing practices
574 records, 1933 - 379 records, 1928

| Group | Number of farms or homes | Percentage of all farms and homes | Percentage of farms on which practices were changed | | | Number of practices adopted per 100 farms or homes |
|---|---|---|---|---|---|---|
| | | | Agricultural | Home economics | Any practice | |
| 5-year period 1928-33: | | | | | | |
| Extension activities on farm or in home. | 185 | 32 | 70 | 50 | 86 | 342 |
| Other farmers or homemakers participating in extension activities..... | 139 | 24 | 64 | 40 | 83 | 221 |
| Farmers or homemakers not participating in extension activities | 250 | 44 | 27 | 4 | 30 | 52 |
| Prior to 1928: | | | | | | |
| Extension activities on farm or in home. | 77 | 20 | 87 | 20 | 91 | 332 |
| Other farmers or homemakers participating in extension activities..... | 102 | 27 | 69 | 12 | 74 | 179 |
| Farmers or homemakers not participating in extension activities | 200 | 53 | 30 | 1 | 30 | 48 |

the comparison is even more striking. (Table 22.) When some member of the family had been in touch with extension workers during the period 1928-33, 68 percent adopted agricultural practices and 40 percent adopted home-economics practices. For the no-contact group, which constituted about one-third of the total, these percentages were 12 adopting agricultural practices and 3 adopting home-economics practices.

The 1933 data still further emphasize the importance of so organizing and conducting extension work as to bring large numbers of people into direct contact with extension workers as was also clearly indicated by the 1928 study.

TABLE 22.-- Contact with extension workers as related to change of practices 574 records, 1933 - 379 records, 1928

| Group | Number of farms or homes | Percentage of all farms and homes | Percentage of farms or homes where practices were adopted | | | Number of practices adopted per 100 farms or homes |
|---|---|---|---|---|---|---|
| | | | Agriculture | Home Econ. | Any practice | |
| 5-years 1928-33: | | | | | | |
| Farmers or homemakers having made contact with extension workers | 384 | 67 | 68 | 40 | 84 | 269 |
| Farmers or homemakers having made no contact | 190 | 33 | 12 | 3 | 14 | 20 |
| Prior to 1928: | | | | | | |
| Farmers or homemakers having made contact with extension workers | 245 | 65 | 76 | 11 | 80 | 213 |
| Farmers or homemakers having made no contact | 134 | 35 | 7 | 0 | 7 | 10 |

## Extent and Influence of 4-H Club Work

The 1933 data show a slight increase, 2 percent, in the number of families with children 10 to 20 years of age. The increase in number of children at home 10 to 20 years of age is also further indication of the lessened opportunities for profitable employment of young people in near-by cities.

As might be expected because of the increased extension staff available to work with young people, the percentage of boys and girls 10 to 20 years of age who were or had been in 4-H clubs was much higher in 1933 than in 1928 -- 30 percent as compared to 14 percent, respectively. (Table 23.) The average age of club members in 1933 was 14.1 years as compared to 13.8 years in 1928. Nineteen percent of the 1933 club members were not in school in contrast to 9 percent in 1928. The increased volume of club work accounts for the greater influence of junior result demonstration upon practices adopted by adults.

## Attitude toward Extension

In the 1933 study a record was made of the attitude of each family toward the three phases of the extension program - agriculture, home economics, and 4-H club. (Table 24.) In general, the percentage of farm families favorable to all three lines of work was about the same. From 16 to 24 percent less of rural non-farm families were favorable to extension work than was true of farm families. However, the non-farm families were about equally favorable to all phases of extension work with a possible slight preference for 4-H club work.

TABLE 23. -- Families and children in junior project work.
574 records 1933 - 379 records 1928

| Item | 5-year period 1928-33 | Prior to 1928 |
|---|---|---|
| Farm or home records obtained.....number | 574 | 379 |
| Families with children of club age (10 to 20 years).....percent | 42 | 40 |
| Children of club age.....number | 566 | 340 |
| Families with children in club work.....percent | 19 | 8 |
| Boys and girls (10 to 20 years) in 4-H club work (ever).....percent | 30 | 14 |
| Boys and girls (10 to 20 years) in 4-H clubs at time records were obtained.....percent | 20 | 9 |
| Club members.....average age | 14.1 | 13.8 |
| Club members not in school at time records were obtained.....percent | 19 | 9 |
| Practices adopted due to influence of junior result demonstrations.....percent | 3.8 | 0.2 |

TABLE 24. -- Attitude toward extension
574 records, 1933 - 379 records, 1928

| Attitude | 1933 | | |
|---|---|---|---|
| | Farm | Non-farm | Total |
| | Percent | Percent | Percent |
| Agricultural extension: | | | |
| Favorable..... | 86.3 | 61.4 | 79.1 |
| Indifferent..... | 13.0 | 36.7 | 19.9 |
| Opposed..... | .7 | 1.8 | 1.0 |
| Home-economics extension: | | | |
| Favorable..... | 80.1 | 63.8 | 75.4 |
| Indifferent..... | 19.6 | 35.5 | 24.2 |
| Opposed..... | .2 | .6 | .3 |
| 4-H club work: | | | |
| Favorable..... | 84.1 | 65.1 | 78.6 |
| Indifferent..... | 15.9 | 34.3 | 21.2 |
| Opposed..... | .0 | .6 | .2 |

Agencies Other Than Extension Relied upon for Assistance

The 1933 data indicate that papers and magazines continue to be the chief sources of information outside the extension service, relative to agricultural and home-economics problems. (Table 25.) A lower percentage of families reported such sources of information relied upon than in the 1928 study, due no doubt to the enlarged extension staff in the county. Own experience, neighbors, and the radio were other sources of information mentioned by a substantial percentage of the families interviewed.

TABLE 26.-- Percentage of farms and homes reporting agencies other than extension relied on for assistance

| Agency | 1933 | | | 1928 |
|---|---|---|---|---|
| | Farm | Non-farm | Total | Farm |
| | Percent | Percent | Percent | Percent |
| Farm problems: | | | | |
| Papers and magazines | 29.6 | 12.6 | 24.7 | 50.9 |
| Own experience | 8.6 | 3.0 | 7.0 | 25.9 |
| Neighbors and friends | 4.9 | 1.2 | 3.8 | 8.2 |
| Radio | 6.4 | .6 | 4.7 | |
| State department of agriculture | 2.9 | .6 | 2.3 | |
| Books | 1.7 | .6 | 1.4 | 5.8 |
| Commercial firms | 1.2 | | .9 | |
| College | 1.0 | .6 | .9 | |
| Dealers | | | | 1.3 |
| Veterinary | | | | .5 |
| Miscellaneous | 5.9 | 3.0 | 5.0 | 7.4 |
| Any | 48.8 | 21.1 | 40.8 | 76.0 |
| Home problems: | | | | |
| Papers and magazines | 18.4 | 18.1 | 18.3 | 24.8 |
| Radio | 4.2 | 3.6 | 4.0 | |
| Own experience | 4.2 | 2.4 | 3.6 | 9.0 |
| Neighbors | .7 | 1.2 | .9 | 1.1 |
| Books | | | | 1.1 |
| Miscellaneous | 3.7 | .6 | 2.8 | 1.8 |
| Any | 26.5 | 24.1 | 25.8 | 34.0 |


Summary

This study compares the progress made by the Cooperative Extension Service of Rhode Island during the 5-year period March 1928 to March 1933 with the progress made prior to March 1928.

Data from 408 farms and farm homes and from 186 rural non-farm homes for 1933 are compared with data collected in 1928 from 379 farms and farm homes in the same areas. Increased numbers of children of club age (10 to 20 years) were found on farms in 1933, reflecting less opportunity for employment in the nearby cities.

More farm homes were equipped with radio and more farm homes were situated on improved State highways. Membership in cooperative-marketing organizations increased, and membership in general farm organizations decreased during the period 1928 to 1933.

The employment of home demonstration agents on a county basis made possible the organization of an increased number of home demonstration clubs.

Extension agents contacted more rural people during the 5 year period 1928-33 than during the entire time extension work was under way prior to 1928.

More farmers and more farm women reported the adoption of improved practices during the 5-year period 1928-33 than during the period prior to 1928. The number of practices changed per farm or home also was larger.

The character of the extension program, as indicated by the nature of the practices changed, was not changed materially after 1928.

Farm and home visits, circular letters, and meetings were the most important means influencing the adoption of practices during the period 1928 to 1933 just as in the period prior to 1928.

Participation in extension activities and contacts with extension workers remained the outstanding factors affecting extension accomplishment.

The volume of 4-H club work and the influence of the junior result demonstration upon adult practices increased materially, due to the availability of county club agents.

On the whole the data presented indicate the degree of progress possible with an adequate county extension personnel working consistently on a common extension program.

Extension Service Circular 204 September 1934

# Progress of Extension Work in Rhode Island During the 5-Year Period 1928-33

*A Study of 408 Farms and Farm Homes and of 166 Non-Farm Homes in Newport, Providence, and Kent Counties, R.I.--1933*

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